

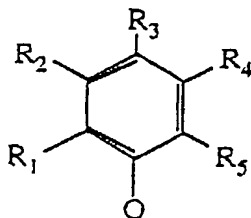
CLAIMS

1. A catalytic composition, ~~characterized in that it is~~ obtained by mixing:
- at least one chromium compound;
 - with at least one aryloxy compound of an element M selected from the group formed by magnesium, calcium, strontium and barium, with general formula $M(RO)_{2-n}X_n$, where RO is an aryloxy radical containing 6 to 80 carbon atoms, X is a halogen or a hydrocarbyl radical containing 1 to 30 carbon atoms and n is a whole number that can take values of 0 to 2; and

- with at least one aluminum compound selected from the group ^{consisting of} ~~formed by~~ tris(hydrocarbyl)aluminum compounds and chlorinated or brominated hydrocarbylaluminum compounds, with general formula AlR'_mY_{3-m} , where R' is a hydrocarbyl radical containing 1 to 6 carbon atoms, Y is a chlorine or bromine atom and m is a number from 1 to 3, and aluminoxanes.

2. A composition according to claim 1, ^{wherein} ~~characterized in that~~ the chromium compound comprises one or more identical or different anions selected from the group ^{consisting of} ~~formed by~~ halides, carboxylates, acetylacetonates, and alkoxy ^{and} aryloxy anions.

3. A composition according to claim 1 ^{wherein} ~~or claim 2, characterized in that~~ the aryloxy radical RO in the aryloxy compound of element M with general formula $M(RO)_{2-n}X_n$ has general formula:



where R₁, R₂, R₃, R₄ and R₅, which may be identical or different, represent a hydrogen atom, a halogen atom or a hydrocarbyl radical containing 1 to 16 carbon atoms.

9 4. A composition according to ^{claim 1} ~~any one of claims 1 to 3~~, characterized in that the aryloxy compound of element M is bis(2,6-diphenylphenoxy)magnesium, bis(2-tert-butyl-6-phenylphenoxy)magnesium or bis(2,4-di-tert-butyl-6-phenylphenoxy)magnesium.

5 9 5. A composition according to ^{claim 1} ~~any one of claims 1 to 4~~, characterized in that the hydrocarbylaluminum compound is dichloroethylaluminum, ethylaluminum sesquichloride, chlorodiethylaluminum, chlorodiisobutylaluminum, triethylaluminum, tripropylaluminum, triisobutylaluminum or methylaluminoxane.

10 6. A composition according to ^{claim 1} ~~any one of claims 1 to 5~~, characterized in that the hydrocarbylaluminum compound is triethylaluminum.

15 7. A composition according to ^{claim 1} ~~any one of claims 1 to 6~~, characterized in that the components of the catalyst are brought into contact in a solvent comprising at least one saturated hydrocarbon, at least one unsaturated olefinic or diolefinic hydrocarbon and/or at least one aromatic hydrocarbon.

8. A composition according to ^{claim 1} ~~any one of claims 1 to 7~~, characterized in that the chromium concentration in the catalytic solution is in the range 1×10^{-5} to 0.1 mole/l.

9 9. A composition according to ^{claim 1} ~~any one of claims 1 to 8~~, characterized in that the mole ratio between the aryloxy compound of element M and the chromium compound is 1:1 to 30:1, and the mole ratio between the hydrocarbylaluminum compound and the chromium compound is 1:1 to 35:1.

10. An ethylene oligomerization process using a catalytic composition according to any one of claims 1 to 9.

11. A process according to claim 10, characterized in that the ethylene oligomerization reaction is carried out at a pressure of 0.5 to 15 MPa and at a temperature of 20°C to 180°C.